

# Portal Building Techniques: Trade-Offs and Design

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The enormous amount of information on the Internet must be collected, systematically sorted and filtered. This would not be achievable without appropriate infrastructure. Portals serve this purpose: they collect information of several different sources to a given place.

Nowadays they are already widely used, but in the near future much more enterprises are going to expectedly use intranet portals to complete daily work and much more Internet portals are going to appear on wide variety of topic.

There are several different techniques to build our portal. A typical question is: what kind of portal building techniques should we choose? We can build our portal either from the ground up or with a framework. Both techniques have their advantages and disadvantages. If we build our portal from scratch, the portal will fully meet our requirements. Our portal will be easily adjustable further on, because we know every character of the code. This can only be the optimal solution if we have enough time to develop. The other possibility is to use a framework, which can be ready bought or downloaded. With its help we can easily compile our portal in less time.

This presentation studies the different portal building techniques paying particular attention to their features and services. These most important features and services are multilayer application architecture, distribution, scalability, modular constructions, extensibility, personalization, user profile, localization, globalization, editing with mutual exclusion, automatic notification, search, forums, appropriate environment of installation and administration, third-party application integration, single sign-on, security and mobile client support.

We have compared the most widespread and up-to-date portal building techniques, because in the near future these are the most likely to be adopted widely. These are Oracle Application Server Portal 10g [1], ASP.NET Web Matrix [2], ASP.NET Whidbey [3], Microsoft SharePoint Portal Server 2003 [4] and IBM WebSphere Portal Server 4.2 [5]. There are several PHP solutions [6] in the market, so we can include only the common features and services in the comparison. We emphasized their common and unique advantages as well [7] and as a case study several portals are provided [8].

The documentation of this topic is quite incomplete and scattered; there is no sample code for their summary and comparison. This presentation is intended to help to choose the optimal solution for building a portal.

## References

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- [3] Alex Horner, Dave Sussman, Rob Howard. A First Look at ASP.NET v. 2.0. Addison- Wesley Pub Co, 2003.
- [4] About SharePoint Products. <http://www.microsoft.com/sharepoint>.
- [5] About WebSphere Portal for Multiplatforms.  
<http://www-3.ibm.com/software/genservers/portal>.
- [6] About PHP. <http://www.php.net>.
- [7] A documentation about comparison of different portal building techniques can be downloaded from <http://www.sch.bme.hu/agi/tdk.html> (in Hungarian). November 2003.
- [8] Simon Robinson, Scott Allen, Ollie Cornes, Jay Glynn, Zach Greenvoss, Burton Harvey, Christian Nagel, Morgan Skinner, Karli Watson. Professional C#, Second Edition. Wrox, 2002.